

Draft 2023 ICARP Impact Report

Letter from the Director

On behalf of the Governor's Office of Planning and Research (OPR), it is my pleasure to share this 2023 Impact Report of the Integrated Climate Adaptation and Resiliency Program (ICARP).

Last year was an exceptional year of progress and accomplishments for the program: the Adaptation Planning Grant Program and Regional Resilience Grant Program awarded nearly \$30 million, the California Climate Change Assessment connected with communities across the state through nine in-person workshops, the Plan Alignment Toolkit expanded with the addition of an updated version of the Coastal Compass, and the Vulnerable Communities Platform launched a test site. I look forward to the continued progress of these and other projects over the year ahead.

The devastating floods California experienced at the start of 2023 may have seemed exemplary, especially on the heels of a multiyear drought. However, the science is unequivocally clear that climate change will cause our weather patterns to swing from one extreme to another, with increasing severity.

As we face the challenges climate change already poses and prepare for them to intensify, I am heartened by the hard work and dedication of the ICARP team to chart a path toward a future where hazards and stressors have less pronounced impacts, especially for the most vulnerable. Guided by the interdisciplinary thought leadership of the ICARP Technical Advisory Council, the program's efforts to deliver cutting-edge climate science, tools, guidance, technical support, policy and planning coordination, and direct investments will undoubtedly keep us on a steady path to resilience.

Sincerely,

Saharnaz Mirzazad

Executive Director, Strategic Planning and Policy Development

Governor's Office of Planning and Research

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Executive Summary

Because California is already experiencing more frequent and severe climate-driven events, including wildfires, drought, and extreme heat, preparing for climate change isn't a distant need, but an immediate challenge whose solutions and strategies need to also support equitable long-term outcomes. The state is meeting the urgency of the moment on adaptation by implementing a comprehensive, coordinated, and science-based approach to climate adaptation, which includes the Climate Change Assessment, the Climate Adaptation Strategy, the Adaptation Planning Guide, and several investment programs. Because the state's climate approach is uniquely multi-faceted, it is important to coordinate across sectors and scales so the outcomes of these efforts are greater than the sum of their parts.

The [Integrated Climate Adaptation and Resiliency Program \(ICARP\)](#), established through [Senate Bill 246 \(Wieckowski, 2016\)](#), advances a cohesive and holistic response to the impacts of climate change by coordinating regional and local efforts with state climate adaptation strategies to support comprehensive planning and accelerate implementation. Through its enabling legislation, ICARP is centrally focused on efforts that advance climate equity and support integrated climate strategies, or those strategies that benefit both greenhouse gas reductions and adaptation.

ICARP works to advance these priorities through five core priority areas, in addition to special initiatives, identified by its Technical Advisory Council:

- Actionable Research & Resilience Metrics
- Decision Support Tools & Guidance
- Building Partnerships & Leveraging Resources
- Funding & Financing
- Climate Equity & Vulnerable Communities

This report provides an overview of ICARP's recent efforts to achieve its mission – detailing the program's innovative approaches, documenting key milestones from 2023, and outlining upcoming deliverables for 2024. Select highlights include:

- The Climate Services team conducted User Needs Assessments in 2023 to guide improvements to the Adaptation Clearinghouse and Cal-Adapt. These User Needs Assessments and additional outreach and engagement illuminated gaps in practitioners' understanding, accessibility, and application of climate adaptation tools and resources. In 2024, the team will pilot new functions on the Adaptation Clearinghouse, including an Adaptation Help Desk to provide hands-on support, to support communities in their adaptation and resilience efforts.

- The Cal-Adapt Analytics Engine will enhance informed decision-making after integrating the latest downscaled climate modeling in 2023 from California's Fifth Climate Change Assessment. In 2024, the Climate Services team will coordinate additional updates to Cal-Adapt with the new data and improve the tool's offerings to meet a greater variety of user needs.
- The Fifth Assessment team finalized a list of 26 research topics for the Assessment's products and issued a Notice of Intent to Award for the core climate research reports. The team engaged over 470 individuals and hosted 13 public workshops in 2023; participants' feedback informed development of a framework and author team structure for the Assessment's Regional and Topical Synthesis Reports, and in 2024, the author teams will assemble and begin developing the reports.
- ICARP's Adaptation Planning Grant Program (APGP) and Regional Resilience Grant Program (RRGP) made their first rounds of awards, investing \$8 million in local planning through APGP and \$21.7million to 10 planning and 6 implementation projects through RRG. Initiation of these projects in 2024 will demonstrate the value of investing in resilience. In 2024, the Extreme Heat and Community Resilience Program will accept applications and issue awards for its first round of funding.
- The Fifth Assessment's Tribal Research program established a Tribal Advisory Group in 2023 to provide guidance and leadership over the program, which released a request for proposals at the end of the year. Additionally, ICARP is conducting a Tribal User Needs Assessment in 2024 to understand Tribes' adaptation planning needs and how ICARP can provide additional support.
- In 2024, the ICARP Technical Advisory Council will return to holding its public meetings with in-person participation. ICARP looks forward to connecting with communities throughout California through these convenings but will maintain virtual participation options to preserve the increased engagement with the Council that happened when meetings went virtual.

Through these efforts, ICARP sought to center equity in processes and outcomes through meaningful engagement, technical assistance, and capacity building efforts. This report includes a detailed description of the goals, processes, outcomes, and lessons learned of select ICARP programmatic efforts to encourage practitioners to adopt similar principles and practices to empower California's vulnerable communities to prepare for climate change.

Looking ahead to 2024, ICARP will continue to deliver on its priorities through the continuation and evolution of several strategic initiatives. The program will continue to foster partnerships and relationships with scientists, state and federal agencies, tribes, businesses, local governments, and community groups so California can thrive in the face of climate change.

Introduction

What is Climate Resilience?

Climate resilience and adaptation are often discussed together, but it is helpful to distinguish between them. Generally, **adaptation** is an action or set of actions that reduce physical climate risk. **Resilience** describes a state of readiness to face climate risks. California is taking steps to prepare for the impacts of a changing climate at the state, regional, and local levels. Preparing for these changes is called adaptation. A series of adaptive steps contribute to resilience.

Adaptation and resilience are essential to maintain the stability and reliability of our natural, built, and social systems in the face of climate threats. In the absence of adaptation, systems that aren't resilient to climate change will experience severe disruption and require significant time and investment to recover, resulting in social, economic, environmental, public health, and other consequences. Because California has already experienced more frequent and severe climate-driven events, including wildfires, drought, and extreme heat, preparing for climate change isn't a distant need, but an immediate challenge whose solutions and strategies need to also support long-term outcomes.

Californians do not and will not experience climate impacts equally. For example, factors associated with race, gender, age, income, health conditions, access and functional needs, occupation, and more can influence the impacts of a changing climate on individuals and communities. Climate equity in an adaptation and resiliency context recognizes and seeks to address the fact that climate change will disproportionately impact communities that already experience environmental and socio-economic burdens and have a lower capacity to withstand and recover from climate impacts.

Developing impactful climate adaptation solutions requires targeted policy and investments that reduce vulnerability, and because existing socio-economic burdens underpin many dimensions of vulnerability, can also redress historic and systemic inequality. Embedding equity in climate action requires both procedural and distributional equity strategies. Procedural equity seeks to create opportunities for meaningful consultation and participation in decision-making for impacted communities to increase the diversity of perspectives and lived experience informing decisions. Distributional equity strives for the fair distribution of benefits and burdens, which includes prioritizing benefits to communities most in need to offset historic under-investment.

Recognizing these challenges and opportunities, the Integrated Climate Adaptation and Resiliency Program advances climate equity throughout its efforts. As part of its foundational work, the ICARP Technical Advisory Council [defined vulnerable communities in 2018](#):

“Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/ or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.”

Call Out Box: Definitions

Adaptation (climate change): Adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Equity: Equity means that all people are justly and fairly included in society and that everyone is able to participate, prosper, and achieve their full potential. It recognizes that everyone enjoys different advantages and faces different challenges, partially due to historically unequal or unfair treatment, and that everyone should be treated justly and fairly to address the historical inequities encountered and according to their circumstances.

Equity (Climate): The central equity challenges for climate change policy involve several core issues: addressing the impacts of climate change, which are felt unequally; identifying who is responsible for causing climate change and for actions to limit its effects; considering the impacts of historical inequality; and understanding the ways in which climate policy intersects with other dimensions of human development, both globally and domestically.

Mitigation (climate change): A human intervention to reduce the human impact on the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks.

Resilience (climate): Resilience is the capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.

Source: [The 2020 California Adaptation Planning Guide](#).

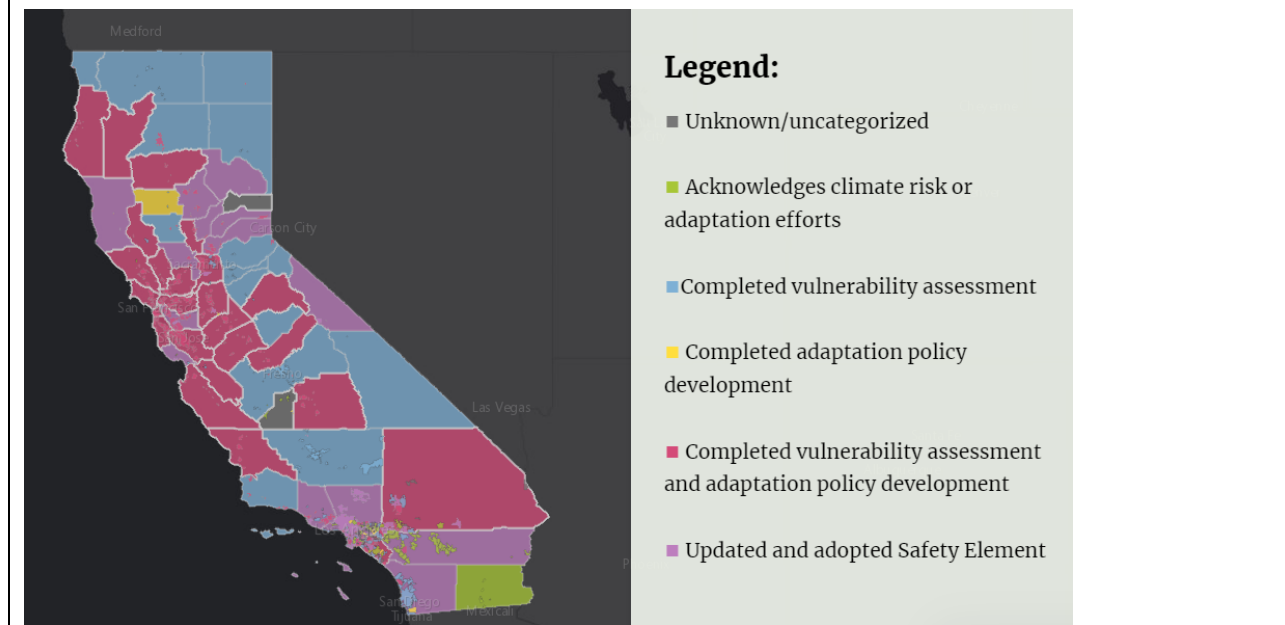
Climate Adaptation in California

The state is meeting the urgency of the moment on adaptation by implementing a comprehensive, coordinated, and science-based approach to climate adaptation. In 2005, California was the first, and for many years, only, state to develop its own Climate Change Assessment, which provides critical and cutting-edge data, research, and actionable tools that underpin state and local resilience actions. California also has a comprehensive framework to guide state action through the [California Climate Adaptation Strategy](#), which was recently updated over 2021 & 2022.

Local governments are also taking action by integrating climate into long-range planning (per [SB 379 \(Jackson, 2015\)](#)). To support local governments in preparing for climate change, the state produces an [Adaptation Planning Guide](#), a step-by-step process to plan for climate change. The planning process promoted by the Guide is flexible so that each local plan is responsive to community needs.

Call Out Box: ResilientCA Adaptation Planning Map

Figure 1. The [ResilientCA Adaptation Planning Map](#) shows that at least 282 (58.5%) of California's cities and 39 (67%) of California's counties have conducted climate risk/vulnerability assessment and adaptation policy development activities.



Integrated Climate Adaptation and Resiliency Program

The [Integrated Climate Adaptation and Resiliency Program \(ICARP\)](#), established through [Senate Bill 246 \(Wieckowski, 2016\)](#), advances a cohesive and holistic response to the impacts of climate change by coordinating regional and local efforts with state climate adaptation strategies to support comprehensive planning and accelerate implementation. Through its enabling legislation, ICARP is centrally focused on efforts that advance climate equity and support integrated climate strategies, or those strategies that benefit both greenhouse gas reductions and adaptation. By connecting and aligning California's adaptation efforts, ICARP advances a coordinated and comprehensive approach to climate adaptation and resilience.

Vision and Principles

At the inception of the program, ICARP developed a Vision and Principles to describe the characteristics of a resilient California, and how adaptation actions can contribute to this outcome. This creates a framework for action that guides adaptation efforts so California can be resilient to changing climate conditions.

ICARP Vision: All Californians thrive in the face of a changing climate. Leading with innovation, California meets the challenge of climate change by taking bold actions to protect our economy, our quality of life, and all people. The state's most vulnerable communities are prioritized in these actions. Working across all levels of government, the state is prepared for both gradual changes and extreme events. Climate change adaptation and mitigation is standard practice in government and business throughout the state. California meets these goals with urgency, while achieving the following long-term outcomes:

All people and communities respond to changing average conditions, shocks, and stresses in a manner that minimizes risks to public health, safety, and economic disruption and maximizes equity and protection of the most vulnerable.

Natural systems adjust and maintain functioning ecosystems in the face of change.

Infrastructure and built systems withstand changing conditions and shocks, including changes in climate, while continuing to provide essential services.

ICARP Principles

Prioritize integrated climate actions, those that both reduce greenhouse gas emissions and build resilience to climate impacts, as well as actions that provide multiple benefits.

Prioritize actions that promote equity, foster community resilience, and protect the most vulnerable. Explicitly include communities that are disproportionately vulnerable to climate impacts.

Prioritize natural and green infrastructure solutions to enhance and protect natural resources, as well as urban environments. Preserve and restore ecological systems (or engineered systems that use ecological processes) that enhance natural system functions, services, and quality and that reduce risk, including but not limited to actions that improve water and food security, habitat for fish and wildlife, coastal resources, human health, recreation, and jobs.

Avoid maladaptation by making decisions that do not worsen the situation or transfer the challenge from one area, sector, or social group to another. Identify and take all opportunities to prepare for climate change in all planning and investment decisions.

Base all planning, policy, and investment decisions on the best-available science, including local and traditional knowledge, including consideration of future climate conditions out to 2050 and 2100, and beyond.

Employ adaptive and flexible governance approaches by utilizing collaborative partnership across scales and between sectors to accelerate effective problem solving. Promote mitigation and adaptation actions at the regional and landscape scales.

Take immediate actions to reduce present and near future (within 20 years) climate change risks for all Californians; do so while also thinking in the long term and responding to continual changes in climate, ecology, and economics using adaptive management that incorporates regular monitoring.

Council Priorities

Each year, the ICARP Technical Advisory Council establishes Council Priorities that structure and guide the program's efforts over the year ahead to advance climate resiliency in California. The Council Priorities provide near-term areas of focus that work toward the long-range goals established in the Vision and Principles, while also being responsive to emerging issues. The 2023 Council priorities are:

- Actionable Research & Resilience Metrics
- Decision Support Tools & Guidance
- Building Partnerships & Leveraging Resources
- Funding & Financing
- Climate Equity & Vulnerable Communities
- Additional Special Initiatives

Programmatic Workstreams

ICARP works to meet its statutory objectives and advance its Vision, Principles, and Council Priorities through its programmatic workstreams. These efforts include the development and dissemination of decision-support tools, actionable climate science, guidance, technical assistance, and grant programs.

Policy and programmatic alignment: ICARP provides the state’s only public forum dedicated exclusively to climate adaptation and resiliency through [the Technical Advisory Council \(Council\)](#). The Council provides a venue for consideration and discussion of California’s resilience policy with state agencies; local, regional, and tribal governments; nonprofits and boundary organizations; academia; and the private sector. Staff integrates feedback from the Council through several avenues of interagency coordination.

Actionable Climate Science: To promote decision-making supported by actionable climate science, ICARP leads the development of [California’s Climate Assessment](#). The Assessment consists of a portfolio of critical and cutting-edge data, research, and actionable tools that underpin state and local resilience actions.

Climate Services: ICARP promotes alignment of resilience priorities across state, regional, local, tribal, and non-governmental entities by providing guidance, tools, and technical assistance. An important resource to support these activities is the [Adaptation Clearinghouse](#), established through SB 246 (Wieckowski, 2015) to serve as a central resource for curated case studies, reports, tools and data, and climate adaptation planning and project best practices.

Direct Investments: ICARP oversees three new grant programs to fund local, regional, and tribal adaptation efforts across the state. The ICARP [Adaptation Planning Grant Program](#) provides support to local, regional, and tribal governments to support much needed adaptation planning efforts. The ICARP [Regional Resilience Planning and Implementation Grant Program](#) supports regions in advancing resilience through capacity-building, planning, and project implementation. The [Extreme Heat and Community Resilience Program](#) will help communities prepare for the impacts of extreme heat.

The following report highlights major programmatic accomplishments in 2023 and outlines the program’s workplan for 2024.

Call Out Box: ICARP Technical Advisory Council Engagement

259 unique individuals registered for the ICARP Technical Advisory Council’s four virtual meetings in 2023.

Case Study: Empowering Climate Resilience Through Meaningful Engagement, Technical Assistance, and Capacity Building

The Integrated Climate Adaptation and Resiliency Program (ICARP) is committed to serving California's vulnerable communities through policy development, partnerships, actionable climate science, technical assistance, and direct investments. Meeting this goal requires effective engagement and capacity building to be truly transformative because policies and programs are most effective when shaped by the lived experience of vulnerable communities. ICARP's thoughtful engagement across its programmatic efforts demonstrates these principles in action, and this case study seeks to encourage broad adoption of these effective policies and practices.

As an organization that serves the entire state of California, ICARP's programs must meet the unique needs of its different communities and ecosystems. This requires seeking input from diverse perspectives, sectors, and regions when developing programs and policies. Implementing these engagement practices across ICARP's numerous programmatic efforts requires thoughtful coordination to avoid overburdening low-capacity communities by repeatedly seeking similar information from them. Additionally, engaging a broad and diverse audience also requires flexibility to meet people where they are. This can be applied literally through physical presence in a community for in-person workshops, or figuratively by holding engagement opportunities during different times of day to accommodate work schedules or sending surveys for people to contribute ideas when they have time. Taken together, these practices center and advance equity by prioritizing diverse representation, with a particular emphasis on seeking the lived experience of overburdened communities that are most affected by the outcomes of this work.

The Fifth Climate Change Assessment's 2023 Request for Information and regional workshop series are illustrative examples of this coordinated approach. While a traditional Request for Information process asks the public to provide input to specific questions or prompts in a written format, the Fifth Assessment team complemented this effort with 4 virtual listening sessions to allow a broader audience to engage with the process. Hosting virtual listening sessions at varied times and prioritizing specific regions invited more diverse partners to provide feedback, especially for participants that are time-constrained, were engaging in a Request for Information for the first time, or had questions about the process.

In the Summer and Fall of 2023, the Fifth Assessment team also held in-person workshops in nine distinct regions of the state and three virtual workshops that engaged over 400 participants. While the development of past California Climate

Assessments has centered on the expertise of researchers and academics, the Fifth Climate Assessment is prioritizing the integration of diverse community voices throughout the research process. In doing so, the Fifth Assessment will fill critical research gaps and inform climate action that directly benefits California communities.

For each of the regional workshops, the Fifth Assessment team partnered with local and regional community-based organizations as co-hosts to better connect with communities that may not have otherwise engaged in the process. To ensure an equity-centered engagement process, the Fifth Assessment team worked with co-hosts and partners to provide participation assistance to under-resourced community members, tribes, and tribal-serving organizations. Additionally, to respect and maximize the time that communities had available to provide valuable feedback, the workshops integrated discussions on two other State initiatives that were also conducting public engagement: the California Climate Adaptation Strategy and the Vulnerable Communities Platform. This coordinated approach avoided overburdening communities by providing a forum for feedback on several initiatives, rather than asking people to make time for multiple meetings on similar topics. Meeting communities where they are reduces the engagement burden placed on them, strengthens relationships with local partners, and centers their lived experiences, which is especially important for communities that are experiencing many climate impacts for the first time.

Engagement efforts by ICARP's Climate Services team in 2023 sought to address a common challenge with climate services: there is often a lack of collaboration between the people who develop climate data, adaptation tools, guidance, and technical assistance and the people that use them to advance climate resilience in their communities. The result of this disconnect is that many people who need these services may find them inaccessible or ineffective for their intended purposes and may choose not to use them at all. ICARP's Climate Services team undertook a user needs assessment that prioritized directly engaging users for feedback to understand how resources might serve low-capacity communities differently than high-capacity communities, and conducted targeted outreach to low-capacity and vulnerable communities. The team used multiple strategies, including interviews, surveys, online data analytics, and other activities to engage over 180 individuals.

Through this process, the team learned that local governments and low-capacity organizations are less likely to use ICARP's resources. Some contributing factors include that users need content and resources that match their realities, with lower barriers to entry, more capacity-building resources, and more locally relevant information. The assessment also found that navigation improvements and content curation could allow users to find the resources they need more easily, but beyond

that, more hands-on support in identifying and leveraging resources would be transformative. This informed the team's 2024 workplan, which will include several site updates and new services, including a new Adaptation Help Desk to help Californians access more real-time adaptation support from the program.

ICARP's investment programs have honed processes for engaging communities to design program guidelines that are responsive to vulnerable communities' needs and provide technical assistance and capacity building for applicants and awardees. In 2023, the Extreme Heat and Community Resilience Program (EHCRP) began developing the program with extensive listening sessions to inform the development of the draft Guidelines and released an [engagement summary](#) to publicly communicate key takeaways. This followed the model set the previous year by the Adaptation Planning Grant Program (APGP) ([APGP Engagement Summary](#) and [APGP Public Comment Summary](#)) and Regional Resilience Grant Program (RRGP), which allowed public engagement to shape APGP and RRGP to be responsive to the needs of vulnerable communities by not only tailoring eligibility criteria to meet these communities' needs and priorities, but also lowering barriers to accessing funding through improvements to the application process itself.

In Winter and Spring 2023, APGP and RRGP released their final Guidelines and solicited requests for proposals. During the application period, each program held webinars to provide general support for application development, and also provided tailored technical assistance to applicants during office hours. The hands-on support provided during office hours also helped low-capacity applicants get specific feedback on how they could develop a more competitive application, making their time spent applying more worthwhile and more likely to be successful. These efforts resulted in the programs exceeding their funding targets for vulnerable communities and Tribes.

86% of RRGP's Round 1 funding will support regional partnerships involving California Native American tribes and/or partnerships serving predominantly Disadvantaged Communities, surpassing its goal of investing at least 51% of funds to directly benefit disadvantaged communities and 10% of funds to support projects led by tribal applicants. The fourteen APGP projects represent a significant step towards fostering cross-sector collaboration and equity in statewide efforts to adapt to climate change. Nine of the projects are located within Justice40 communities and will advance the Biden Administration's goal to invest in communities burdened by legacy pollution. Of the nine projects, three are led or co-led by California Native American tribes.

The teams also went beyond the norms of grant program management to provide additional support to projects that did not receive funding by providing feedback to

unawarded applicants on ways to improve their applications in future rounds and to recommend other funding sources that could also meet their needs. The teams intend to replicate and build on this success with the EHCRP's first round of awards in 2024 and any other future funding opportunities.

Finally, the ICARP Technical Advisory Council, as the state's only public forum exclusively devoted to climate adaptation and resiliency, has a unique obligation to represent and engage California's diverse regions and elevate the needs of vulnerable communities. ICARP strives for a broad range of perspectives [represented on the Council](#) to balance different areas of expertise, sectors, geographies, level of capacity, and urban and rural contexts. This diversity of voices and perspectives helps to spotlight unique challenges and opportunities the state could be more responsive to and strengthen connections with communities that would benefit from additional support and capacity.

Contributions from Councilmembers in 2023 helped the program be more intentional about centering equity in all aspects of ICARP's work, from increasing specificity in the language about the importance of equity in the 2022 Impact Report to challenging the grant programs to set ambitious targets for investing in vulnerable communities. In 2024, the Council will improve its ability to connect with and highlight the unique needs and opportunities of California's diverse communities by holding hybrid meetings. This will allow ICARP to maximize the ability to engage California's communities through both the flexibility and convenience of virtual participation as well as the grounding in local context and relationship-building of in-person settings.

As ICARP continues to grow and adapt to the ever-changing landscape of climate change in California, the lessons learned from communities throughout the state will enable the program to continue to lead by developing processes, policies, and programs that meet ICARP's vision of prioritizing California's most vulnerable communities in the state's resilience efforts.

Programmatic Implementation: 2023 Progress and 2024 Vision

Actionable Research & Resilience Metrics

Actionable climate science is a cornerstone of California's leadership on climate change and supports science-informed policies and investments to respond to accelerating climate impacts. California provides resources to translate and apply climate science to empower communities, the private sector, and local, regional, and tribal governments to make informed decisions.

2023 Accomplishments

The downscaled climate change projections and scenarios that form the foundation of the Fifth Climate Change Assessment continued to roll out over 2023 and are becoming available through the [Cal-Adapt Analytics Engine](#). Another foundational step, determining the scope of the Fifth Assessment's products, cleared with the release of a list of [26 research topics](#) at the beginning of the year. Subsequently, the team released a Request for Proposals for the Assessment's Core Climate Research reports and issued a [Notice of Intent to Award](#) on November 1st, 2023.

The team made significant progress in 2023 to establish frameworks for the Assessment's Regional and Topical Synthesis Reports. This involved extensive outreach through the release of a Request for Information and four virtual listening sessions for the Regional Synthesis Reports, as well as nine in-person and three virtual workshops to gather input from communities on the scope of the Regional and Topical Synthesis Reports. This public engagement also informed updated boundaries of the Fifth Assessment's regions, strengthened connections with the forthcoming Vulnerable Communities Platform, and supported the State Adaptation Strategy 2024 Update. At the end of the year, the team solicited nominations for the Regional Synthesis Report author teams and selected nine Coordinating Lead Authors.

The Fifth Assessment's Tribal Research Program formally established the [Tribal Advisory Group](#) to provide guidance and leadership to the program. Over the course of the year, the program developed and released draft Guidelines and public input on the draft shaped the final Guidelines, released in the fall alongside a Request for Proposals. The team conducted extensive engagement and government to government consultation to inform the scopes and author structure of the Indigenous Knowledge Guidance and Tribal and Indigenous Communities Report and ways in which tribal and indigenous knowledges should be uplifted throughout the Assessment's research products.

Finally, the Fifth Assessment team participated in multiple statewide conferences in 2023, such as the [California Tribal Water Summit](#), the [California Adaptation Forum](#), the [American Planning Association California Chapter Conference](#), the [Climate Science Alliance’s San Diego Climate Summit](#), the [American Geophysical Union’s Annual Meeting](#), the [Localizing California Waters Conference](#), and the [Tribal Climate and Health Adaptation Summit](#). These provided opportunities to broaden awareness of the Assessment, upcoming opportunities to contribute to the Assessment, and strengthen the programs’ network and connections.

ICARP also established its vision for the Science Advisory Group in 2023. The Council’s input on the structure and framework of the Science Advisory Group contributed to a re-imagining of the group as a “network of networks” to include a wider range of expertise and input. The team identified four priority areas for building relationships with existing networks, which encompass community and environmental justice organizations, interagency collaborators, local governments or low-capacity organizations interested in technical assistance, and federal and academic experts.

Call Out Box: 2023 Fifth Assessment Engagement

In 2023, Staff conducted extensive outreach and engagement:

- 70 participants in 4 virtual listening sessions for the Synthesis Reports Request for Information.
- 400+ participants in 9 in-person and 3 virtual regional workshops.

2024 Work Plan

2024 will mark the completion of the climate projections and data scenarios of the Fifth Climate Change Assessment. The team will finalize Regional and Topical Synthesis Report author teams and initiate the report development process, including development of the Tribal Communities Report. The Tribal Research Grants Program will issue a second solicitation for grant proposals in the Spring, announcing funding awards in the Fall. The program will also make final awards for the Core Climate Research reports projects (see [Notice of Intent to Award](#)) and these projects will begin. The team will continue to hold quarterly briefing events and begin holding quarterly regional community engagement opportunities.

In 2024, the Science Advisory Group will develop science communications around recommended Representative Concentration Pathway (RCP) and Shared Socio-economic Pathway (SSP) modeling scenarios for science-informed climate planning in California. The RCP and SSP modeling include multiple plausible scenarios for global emissions trajectories, but high variability in the latter years creates significant uncertainty that makes long-term planning and projects a challenge. This

guidance will fill a gap by bridging a highly technical aspect of climate science to provide more narrow recommendations on the most plausible scenarios to use in planning decisions, and how to communicate the context and implications of those scenarios.

Finally, the Climate Services team will develop an evaluation protocol to assess the impact and outcomes of ICARP's programs and projects. The team will pilot test this framework through initial applications to the Adaptation Clearinghouse, technical assistance services, the Vulnerable Communities Platform development process, and the Cal-Adapt visualizations for general users. Lessons learned from this pilot testing will inform the utility of this framework for other ICARP workstreams.

Call Out Box: Core Climate Research Over-Subscription

87 proposals sought \$29.4 million for Core Climate Research grants, over 5 times the amount available.

Decision Support Tools & Guidance

To support local governments with adaptation planning and implementation, the state supports grant programs, guidance, technical assistance, capacity-building, and collaborative partnerships. ICARP plays a central role in equipping local governments and stakeholders across the state with the tools and resources they need for climate adaptation planning and implementation.

2023 Accomplishments

Ongoing development of the Adaptation Clearinghouse's resources continued in 2023. The team added information on California cities' resilience planning progress to the ResilientCA Adaptation Planning Map, fulfilling the tool's intent to inventory local government climate risk, adaptation, and resiliency planning efforts and track progress towards statewide adaptation planning ICARP also released an update to the [Coastal Resilience Compass: A Plan Alignment Guide](#) and a [plan alignment case study from the City of Santa Cruz](#), complementing the resources in the [Plan Alignment Toolkit](#).

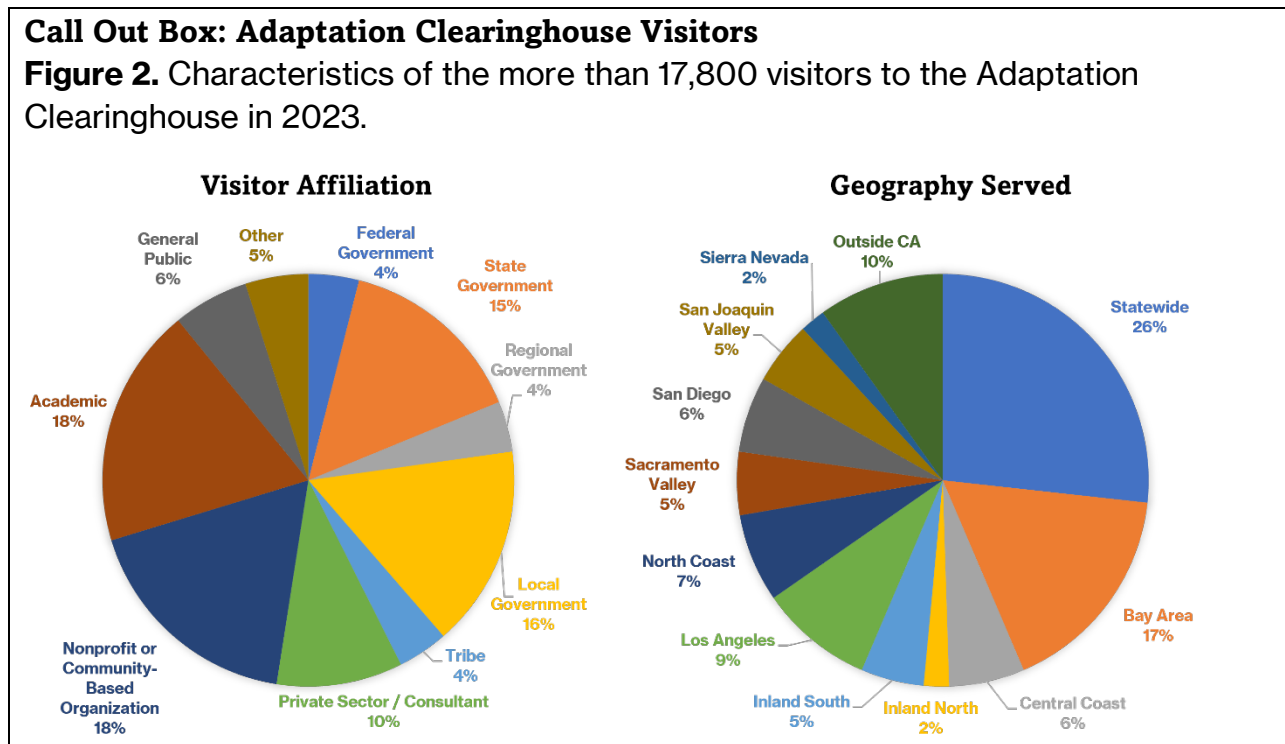
This year, the User Needs Assessment that will inform forthcoming updates to the Adaptation Clearinghouse and Cal-Adapt concluded and Staff [shared the results with the Council](#). The team also presented the findings of the Cal-Adapt User Needs Assessment to the California Energy Commission's Climate Data Analysis Working Group. Further collaboration with the California Energy Commission in 2023 included pilot testing the Cal-Adapt Analytics Engine.

The team promoted ICARP’s tools and resources in several other forums. Staff presented on the Adaptation Clearinghouse and ICARP resources at a California Office of Emergency Services and Federal Emergency Management hazard mitigation and climate planning training. The team also presented on plan alignment at the [UC Davis Wildfire Resilient Structures Conference and Tradeshow](#).

Additionally, ICARP participated in an interagency working group convened by the Office of Environmental Health Hazard Assessment to coordinate the development of an extreme heat ranking system pursuant to [AB 2238 \(L. Rivas, 2022\)](#).

Call Out Box: Adaptation Clearinghouse Visitors

Figure 2. Characteristics of the more than 17,800 visitors to the Adaptation Clearinghouse in 2023.



2024 Work Plan

Updates to the Adaptation Clearinghouse planned for 2024 will sequence changes to the information architecture and navigation, homepage, and then intermediary pages (topics, case studies, tools and data, and search page). The Clearinghouse will also undergo integrations with the Vulnerable Communities Platform and Cal-Adapt. Finally, the team will integrate new features, including a new Technical Assistance Help Desk.

In 2024, Cal-Adapt visualization development will proceed with integrating new Fifth Assessment data and Representative Concentration Pathway/Shared Socio-Economic Pathways guidance. Other updates will include prototypes for revised visualization and climate snapshot tool features.

ICARP will continue to refine and build upon its state adaptation guidance products through updates to the Planning and Investing for a Resilient California Guidebook. The new projections generated through the Fifth Climate Assessment and the guidance of the Science Advisory Group will inform revisions to the Planning and Investing for a Resilient California Guidebook. The team will also model the Plan Alignment Toolkit approach by advising and partnering with California communities on implementing plan alignment best practices.

After the development of the extreme heat ranking system, ICARP will play a crucial role in supporting uptake and application of the statewide extreme heat ranking system by developing a comprehensive public communication plan, recommending partnerships with local entities, and reviewing the system to provide specific heat adaptation measures for local governments in alignment with broader adaptation policies.

Building Partnerships & Leveraging Resources

To support development of climate adaptation as an emerging field, leveraging networks and building a community of practice is important to continually scale and improve adaptation and resiliency efforts. ICARP supports local and regional adaptation and resiliency planning and disaster recovery efforts through facilitation, collaborative partnerships, funding alignment, and technical assistance.

2023 Accomplishments

The ICARP Council convened in its capacity as the Citizen Advisory Committee for the Community Development Block Grant – Mitigation program to [discuss Plumas County's recovery efforts](#). The speaker from Plumas County emphasized the importance of data and information needs for long-term recovery planning. The Department of Housing and Urban Development approved an amendment to the 2021 CDBG-DR Action Plan for unmet needs from the 2021 wildfires, which will make funding available for reconstruction and home hardening for low- and moderate-income households in Plumas County.

Staff continues to participate in weekly coordination meetings for the Community Planning and Capacity Building – Recovery Support Function convened by the Office of Emergency Services and attended by ICARP Staff, the department of Housing and Community Development, and the Federal Emergency Management Agency. 2023's flood events broadened the emphasis of this group to go beyond the wildfire emphasis from past years. Finally, the group initiated conversations about reinstating the Peer Learning Network.

The Climate Services User Needs Assessment completed in July 2023 revealed that adaptation practitioners need more direct technical assistance. Staff conducted additional outreach and research in 2023 to identify technical assistance priorities and opportunities for alignment with other technical assistance providers.

In November OPR co-hosted a Local Government Roundtable with SANDAG, CivicWell, MTC/ABAG, CALCOG, ICLEI, SACOG and ILC. The Roundtable hosted city managers and municipal planning organizations across the state. State, regional, and local leaders are reimagining entire transportation networks, installing thousands of miles of broadband, developing large-scale clean energy projects, and building thousands of new housing units to collectively accelerate clean energy, address climate change, and connect Californians to critical opportunities.

The event was an opportunity for state officials to listen to local leaders about implementation tensions that exist when trying to reach the various goals of the state including affordable housing, decarbonization, climate resilience, public health and economic development. Many state agency officials including representatives from CARB, HCD, CPUC, CTC, Caltrans, and CEC were present to share their work and listen to local and regional officials. While climate resilience and ICARP priorities were not the center of the conversation, some ICARP staff attended and themes arose around how sea level rise, wildfire and extreme heat impacts and resilience goals should be considered in local and regional government contexts, as local officials are continually balancing a complex array of local and state priorities.

OPR received excellent feedback on the event, including a general consensus that these types of listening sessions are critical to good governance and fostering ongoing support for local and regional governments in working towards California's ambitious environmental, economic and societal goals.

2024 Work Plan

Based on discussions with Staff at the Department of Housing and Community Development (HCD), ICARP Staff will initiate dissolution of the Memorandum of Understanding (MOU) underlying the Community Development Block Grant – Mitigation program. Changes to the Department of Housing and Urban Development's requirements for the program no longer necessitate the association of a public Citizen Advisory Committee with the program. Because these items rarely generated public input into the program, Staff determined that the MOU was not meeting its purpose and the ICARP Technical Advisory Council could be more impactful focusing its efforts elsewhere. ICARP and HCD Staff will continue to coordinate and will leverage the Council for discussions on this program when deemed beneficial.

ICARP Staff’s continued participation in the Community Planning and Capacity-Building – Recovery Support Function program will support coordination with emergency management agencies to integrate resilience planning into recovery efforts. This includes developing a robust scope for the re-launch of the Peer Learning Network, which will help ICARP Staff better understand and provide tools, guidance, and technical assistance to support resiliency in California’s disaster-exposed and -impacted communities.

The Climate Services team will launch more formal technical assistance services in 2024. The team will pilot an Adaptation Help Desk on the Adaptation Clearinghouse, and based on this experience, integrate Adaptation Help Desk functions into the Vulnerable Communities Platform and Cal-Adapt. Other priorities include supporting alignment and coordination across State technical assistance providers and supporting peer networks and capacity building.

Funding & Financing

Adequately meeting the scope and scale of climate change requires direct investment in capacity-building, planning, and project deployment to advance adaptation and resiliency in California. ICARP has three programs that provide direct support for adaptation planning and projects, works to enhance the state’s ability to leverage federal investment, and develops partnerships with other State agencies’ programs that support the resiliency of California’s natural and built environment.

2023 Accomplishments

Continued progress under ICARP’s Federal Emergency Management Agency Cooperative Technical Partners grant in 2023 included sharing the lessons learned from coordinating the Adaptation Planning Grant Program (APGP) with federal Hazard Mitigation Act (HMA) funding. Staff developed a case study documenting challenges, opportunities, and lessons learned from incorporating HMA eligibility into the first round of APGP Guidelines.

Call Out Box: ICARP Grant Programs’ Over-Subscription

ICARP’s investment programs attracted significant interest, with applicants seeking far more funding than available:

- 83 applications to the Regional Resilience Grant Program included 326 applicants and requested \$111 million, more than 5 times the funding available.
- Applicants to the Adaptation Planning Grant Program requested \$63 million, almost 8 times the funding available.

The Adaptation Planning Grant program released its final Guidelines and Request for Proposals at the start of the year, and subsequently hosted a workshop series to provide technical assistance to prospective applicants. In the spring, the program announced [\\$8 million in awards to 14 projects](#). In the fall, the team updated the Guidelines for a second round of funding and contracted with the 14 grantees.

The Regional Resilience Grant Program engaged over 780 organizations in 2023 through mailing lists, workshops, surveys, and application submissions. In June, the program published final Guidelines and released a Request for Proposals. At the end of the year, the team announced [\\$21.7 million in awards for 10 planning grants and 6 implementation grants](#). Finally, the program published a report to the Legislature on the first round awards and impact of the program.

In 2023, ICARP kicked off the Extreme Heat and Community Resilience Program with a listening session at the first quarter ICARP Technical Advisory Council meeting. Throughout the year, the team hosted a series of 13 public workshops and additional focus groups to ensure the Grant Guidelines meet the needs of heat vulnerable populations. An [engagement summary](#) captures the key takeaways of those workshops. In the fall, the program released Draft Guidelines for public comment and prepared to release the program Notice of Funding Availability.

2024 Work Plan

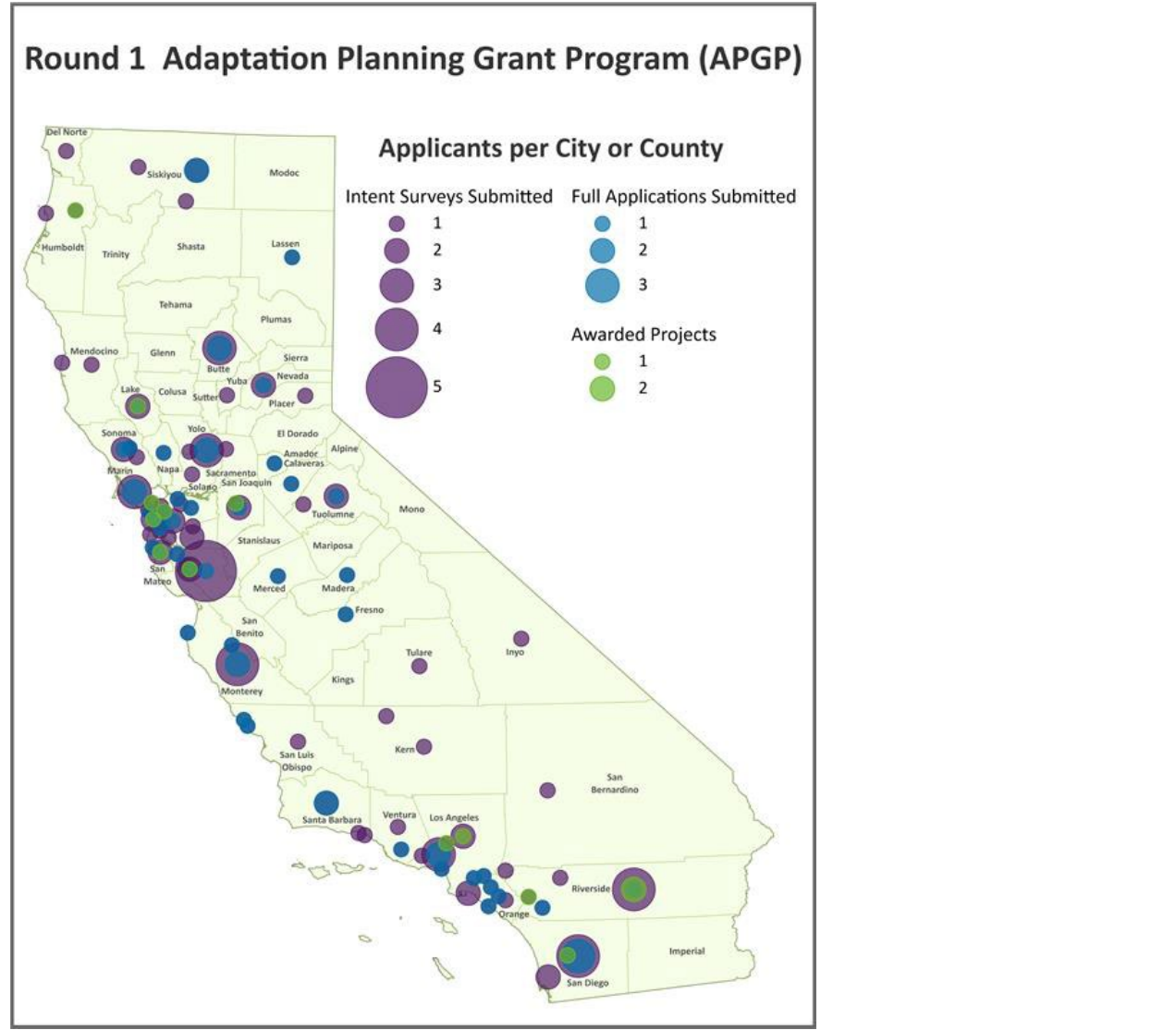
In 2024, ICARP's Cooperative Technical Partners grant will support outreach and engagement with California Native American Tribes to inform a Tribal User Needs Assessment that will identify opportunities for ICARP to better serve the resilience planning needs of California's Tribes. Additionally, Staff will establish a state agency advisory group to inform the development of a guidebook on aligning state climate resilience investment programs with federal hazard mitigation assistance funding.

The Adaptation Planning Grant Program will solicit public input on draft Guidelines for the program's second round of funding, release a solicitation, and announce awards in 2024. The Regional Resilience Grant Program's awardees will initiate their projects and ICARP Staff will conduct peer-to-peer learning workshops with the grantees to support the capacity-building goals of the program.

The Extreme Heat and Community Resilience Program will release the final Guidelines, application, and Notice of Funding Availability for its first round of funding at the start of 2024. After reviewing applications with an interagency review panel, the program will announce awards and initiate technical assistance activities with grant recipients.

Call Out Box: Geography of Adaptation Planning Grant Program Applications and Awards

Figure 3: Map depicting the number of applicants to and awardees of the Adaptation Planning Grant Program from each California county.



Climate Equity & Vulnerable Communities

Reducing risks from climate impacts requires strengthening protections and increasing the resilience of communities and people to respond, recover, and adjust to climate change driven impacts. Yet, some communities face compounding vulnerabilities and experience disproportionate impacts, particularly low-income and rural communities, communities of color, and tribal nations. A resilient California ensures all communities can weather and adjust to climate change so that all

communities can thrive. Ensuring a climate resilient “California for All” requires focused support for those communities most vulnerable to climate threats.

2023 Accomplishments

In 2023, the Vulnerable Communities Platform (VCP) staff created [demonstration site](#) to outline what the main functionalities of the platform would look like to assist in facilitating discussions about stakeholder needs.

Staff leveraged the Fifth Assessment’s regional workshops throughout the state to engage a variety of other community-based organizations, local governments, and academic institutions on the development of the Vulnerable Communities Platform. The team continued to collaborate on the direction of the platform with the Community Resilience Working Group, a collaborative of equity and environmental justice nonprofits and community-based organizations. The team also reestablished the Interagency Technical Working Group (ITWG) and consulted state agency experts on the best data sources. At the fourth quarter ICARP Technical Advisory Council meeting, [Staff provided the Council with an update on the project](#) and the robust discussion from the Council contributed to further improvements.

2024 Work Plan

In 2024, the team will initiate a community engagement partnership pilot to solicit feedback on usability of VCP prototype, collect on-the-ground experiences with climate change to fill in data gaps on the platform, and serve as examples of how experiential knowledge can be combined with climate risk data to foster inclusive adaptation planning. This pilot will focus on [area] before expanding to other regions in the state. Throughout the year, Staff will refine the Vulnerable Communities Platform prototype based on feedback generated through community workshops and engagement opportunities to ensure the tool reflects the lived experience of California’s vulnerable communities. By the end of the year, the platform will launch in a revised form that includes the full suite of functions (mapping tool, community resilience assessments, resource springboard, and tool comparison) planned for the tool.

Additional Special Initiatives

While many actions to promote adaptation and resiliency are inherently longer-range efforts, the pace and urgency of climate change also requires a rapid response to emerging challenges. ICARP responds proactively to new and emerging issues and opportunities as they align with the ICARP vision and principles. This includes building new partnerships and initiatives and providing guidance and

support for partner efforts to respond in real time to local, regional, and state adaptation and resiliency needs.

2023 Accomplishments

The California Natural Resources Agency, working in partnership with ICARP, developed and released a [2022 Implementation Report](#) that documents the progress the state made in implementing the [2021 California Climate Adaptation Strategy](#). Additionally, the team prepared to update the Strategy in 2024 by releasing a Scope of Work for a contracting firm; gathering feedback to inform the update through regional workshops, a session at the California Adaptation Forum, and leveraging the Interagency Resilience Work Group for agency input; and developing a Draft 2024 Strategy for release in 2024. In preparing the Draft 2024 Strategy, Staff identified priority actions from the Extreme Heat Action Plan for integration into the 2024 Strategy.

2024 Work Plan

In early 2024, the California Natural Resources Agency and ICARP will release a Draft 2024 California Climate Adaptation Strategy. The agencies will work with a contractor to support the refinement of this Draft, including conducting outreach and engagement throughout the state. Additionally, the team will collect information from agency partners on their 2023 implementation progress on the 2021 Strategy to support the development of the 2023 Implementation Report, which will be released in the spring.

Under the direction set by SB 306 (Caballero, 2023), OPR with the California Natural Resources Agency will release an update to the Extreme Heat Action Plan by July 1, 2026, and every three years thereafter. Based on this timeline, ICARP does not anticipate significant work in 2024 on the Extreme Heat Action Plan.

Appendix A: History of California's Resilience Action

Foundational and Recent Legislation

AB 1482 (2015) – Requires the state to update its climate adaptation strategy every three years. This includes updates to considerations involving planning and investment decisions by state agencies.

SB 246 (2015) – Established ICARP to coordinate regional and local efforts with the state-level climate adaptation strategies through a Technical Advisory Council and the Adaptation Clearinghouse. Also requires that the Adaptation Planning Guide be updated by various state agencies as well.

SB 379 (2015) – Requires that city and county general plans include a safety element that addresses climate adaptation and resiliency strategies identified in the city or county's vulnerability assessment.

AB 78 (2020) – Establishes the Climate Catalyst Revolving Loan Fund within IBank to provide loans to projects that advance California's climate goals and reduce climate risk.

AB 2800 (2020) – Indefinitely extends a requirement that state agencies consider climate impacts when planning, designing, building, maintaining, or investing in infrastructure.

SB 1320 (2020) – Tasks OPR with leading the development of the California Climate Change Assessment every five years, in partnership with state agencies.

SB 1 (2021) – Establishes a Sea Level Rise State and Regional Support Collaborative, composed of several state agencies to provide information and support for sea-level rise planning and projects. Requires assessment and mitigation of sea level rise risk by state and regional agencies and directs the Coastal Commission to develop guidelines for assessing and mitigating sea level rise in Local Coastal Plans.

SB 458 (2021) – Requires the Wildfire and Forest Resilience Task Force to revise its Action Plan every five years and develop an implementation strategy to track progress.

AB 1384 (Gabriel, 2022) – Updates requirements to the state's climate adaptation strategy to assess climate risks to vulnerable communities and emphasizes that the state should prioritize action that reduces climate risk to vulnerable communities.

AB 2238 (L. Rivas, 2022) – Directs CalEPA, in partnership with other entities, including ICARP, to develop an extreme heat ranking system, and ICARP must

develop a communications campaign for the system and recommendations for local government policy mobilization during extreme heat events. The bill additionally directs the Department of Insurance to prepare a report on insured and uninsured losses during extreme heat events.

SB 852 (Dodd, 2022) – Allows local governments to establish an enhanced infrastructure financing district to finance climate adaptation projects.

SB 306 (Caballero, 2023) – Directs OPR and CNRA to update the Extreme Heat Action Plan by July 1, 2026, and every three years thereafter.

Recent Executive Orders

E.O. S-13-08 – Requires CA Natural Resources to develop a statewide Climate Adaptation Strategy. Orders Business, Transportation and Housing Agency (now BCSH) to assess vulnerabilities within the transportation system from sea level rise and orders OPR to give land-use planning guidance for climate impacts.

E.O. B-30-15 – Established a greenhouse gas reduction target and ordered state agencies to take steps toward preparation of climate impacts. The order also requires that Safeguarding California be updated every three years, and that it identifies vulnerabilities by sector or region.

E.O. N-05-19 – Directs CAL FIRE to recommend administrative, regulatory, and policy changes that will help prevent and mitigate wildfires.

E.O. N-19-19 – Requires the state to continue to mitigate the impacts of climate change through investments, transportation operations, and reduction of the state's carbon footprints at state owned and leased facilities.

Appendix B: ICARP Investment Program Awardee Profiles

Adaptation Planning Grant Program Projects

City of Berkeley Safety Plan and Environmental Element Update

Total Award: \$497,042

The City of Berkeley, in partnership with the Ecology Center and the Berkeley Climate Equity Collaborative, will co-create with community an update to Berkeley's General Plan Safety Element, development of a new General Plan Environmental Justice Element, and creation of metrics that incorporate equitable outcomes to monitor and evaluate progress towards meeting the City's climate and resilience goals. View the project profile [here](#).

San Mateo County OneWatershed Climate Resilience Framework

Total Award: \$649,64

The City/County Association of Governments of San Mateo County is partnering with six water agencies and the community-based organization Climate Resilient Communities to develop a framework that empowers communities to identify local concerns and explore pathways to becoming resilient. View the project profile [here](#).

San Jose Interdependent Water, Energy, Security Electrified Transportation Climate Adaptation Plan

Total Award: \$649,970

The San José Interdependent Water, Energy, Security & Electrified Transportation Climate Adaptation Planning Proposal aims to develop a comprehensive climate adaptation plan that focuses on critical infrastructure and incorporates the needs of vulnerable communities. View the project profile [here](#).

Ramona Barona Climate Adaptation and Action Plan

Total Award: \$596,600

The Ramona-Barona Climate Collaborative, led by the Ramona Municipal Water District and its partners the Barona Band of Mission Indians, Sustainable Ramona and the Ramona Chamber of Commerce, aims to develop a comprehensive climate adaptation and action plan to address climate impacts in the area including extreme heat, water shortages, landslides, flooding, and wildfires. View the project profile [here](#).

Planning for an Equitable, Climate-Safe Lake

Total Award: \$649,350

Planning for an Equitable, Climate-Safe Lake will create an inclusive and collaborative framework for improving climate adaptation planning and implementing risk reduction projects in Lake County. The project supports the Community Risk Reduction Authority (RRA) in becoming a self-sustaining climate action provider with an equity focus, including embedding diversity, equity, and inclusion values into RRA's leadership and processes, assessing vulnerabilities, implementing actions from the Local Hazard Mitigation Plan, and tracking progress. View the project profile [here](#).

Hoop Valley Tribe Climate Adaptation Plan

Total Award: \$338,448

The Hoopa Valley Tribe aims to complete climate adaptation scoping activities, a Vulnerability Assessment, and develop a Climate Adaptation Plan in partnership with the community and tribal staff. Along with the Planning Department of the Hoopa Valley Tribe, they will conduct community outreach and use an online survey to increase accessibility and participation from the community. Developing a climate adaptation plan that includes pathways to forest resilience and conservation efforts for salmonid fisheries is a priority for the Hoopa Valley Tribe. View the project profile [here](#).

City of San Fernando Climate Action and Resilience Plan

Total Award: \$599,918

The City of San Fernando will complete a Climate Action and Resilience Plan (CARP) and update elements in its General Plan (land use, circulation, open space, and conservation) which are crucial for effective resiliency planning and aligning with local, regional, and state initiatives. The project will engage the community early on to gather input in an equitable manner, develop targeted strategies to address disparities, and support vulnerable populations to address climate-related concerns. View the project profile [here](#).

WRCOG Energy Resilience Plan 2.0 Microgrid Feasibility Studies

Total Award: \$471,000

\$471,000 WRCOG will develop an Energy Resilience Plan 2.0, which will identify up to ten sites across Western Riverside County to conduct feasibility studies to determine the potential to implement microgrids and community resilience centers. View the project profile [here](#).

LA's Cool Capital Stack

Total Award: \$556,000

The LA Cool Capital Stack creates a pipeline of viable community-led climate resilient infrastructure projects designed to strengthen LA County communities most vulnerable to extreme heat and other climate hazards. It establishes an agency-community collaborative that brings together LA County, Metro, and Infrastructure Justice Los Angeles (IJLA) to co-create an approach to equitable, climate resilient infrastructure development. View the project profile [here](#).

San Rafael Climate Adaptation Planning Collaborative

Total Award: \$644,200

Led by the City of San Rafael, the San Rafael Climate Adaptation Planning Collaborative will work with disproportionately vulnerable communities in partnership with local organizations in the Canal neighborhood to co-create solutions for improved safety and resilience. Partners will work to improve understanding of climate hazards, prioritize adaptation measures, and build climate capacity within community-based organizations while providing STEM educational opportunities for students from the Canal neighborhood. View the project profile [here](#).

Shade Equity Masterplan for the Unincorporated Eastern Coachella Valley

Total Award: \$644,411

The Shade Master Plan for Eastern Coachella Valley's unincorporated communities in Riverside County will benchmark and develop strategies for shade in predominantly low-income, Spanish-speaking areas experiencing temperatures exceeding 120 degrees. The plan will serve as a blueprint for investing in new shade infrastructure and adapting to extreme heat and associated benefits to residents, agencies, and stakeholders in the area. View the project profile [here](#).

Stockton Climate Action and Adaptation Plan

Total Award: \$650,000

The City of Stockton will partner with trusted, local non-profits and engage a highly qualified consultant to create a new Climate Action and Adaptation Plan. The City's current CAP hasn't been updated since 2014, leaving the City and its partners without a clear vision for the future of Stockton's environment. A new CAP that focuses on public health and equity will guide strategies to address the impacts of climate change, particularly for disadvantaged communities in Stockton. View the project profile [here](#).

Yosemite Slough Adaptation Plan

Total Award: \$649,000

\$649,000 The Yosemite Slough Adaptation Plan aims to address the disparity in adaptation planning between the Bayview Hunters Point neighborhood and the rest of San Francisco's urban waterfront. The plan focuses on building community capacity, developing equitable adaptation strategies, and positioning Yosemite Slough for federal funding. Project partners include the San Francisco Planning Department, En2Action, BAYCAT, San Francisco Estuary Institute, California State Parks Foundation, and other city agencies. View the project profile [here](#).

Regional Resilience Grant Program Implementation Projects

Le Grand Community Water Program

Total Award: \$3,000,000

The Le Grand Athlone Water District, in partnership with the Le Grand Community Services District and Socio-Environmental Education Network (SEEN), will address drought and flood risks. The project implements sustainable groundwater management practices, including new well construction, irrigation canal connections, and community education programs.

Kó:dom Hÿbísín (“Land Stewardship”)

Total Award: \$1,931,410

The Mechoopda Indian Tribe of Chico Rancheria, in partnership with the Berry Creek Rancheria of Tyme Maidu Indians of California, California State University Chico and the Big Chico Creek Ecological Reserve will address wildfire, extreme heat, and drought hazards through land stewardship, using cultural fire to reduce fuel loads and cultivate climate-resilient vegetation.

Los Angeles Regional Collaborative: Heat Education, Ambassadors, and Training (LARC-HEAT)

Total Award: \$2,999,999

The University of California, Los Angeles/Los Angeles Regional Collaborative, in partnership with the Fernandeño Tataviam Band of Mission Indians, Rising Communities, and the Los Angeles County Department of Public Health will combat extreme heat through a comprehensive Heat Ambassador initiative, focusing on educating and protecting heat-vulnerable communities.

Regional Cohesive Fire Strategy for Evacuation Preparedness and Wildfire Resilience

Total Award: \$1,588,838

The County of San Diego, in partnership with the City of San Diego and the Fire Safe Council of San Diego County will focus on addressing wildfire hazards by educating residents, maintaining defensible spaces, and safeguarding evacuation routes for high-risk communities.

Cultural Fire & Land Stewardship for Wildfire & Climate Resilience

Total Award: \$2,989,995

The Tamien Nation, in partnership with the North Fork Mono Tribe, aims to restore indigenous practices and enhance wildfire protection on ancestral lands by forming stewardship crews, conducting vegetation management, and raising awareness.

Energy-Resilient Fire Services in High-Threat Communities

Total Award: \$3,000,000

The Redwood Coast Energy Authority, in partnership with the Yurok Tribe Fire Department, Karuk Tribe Department of Natural Resources, and Hoopa Fire will install energy-resilience infrastructure for fire stations in high-risk areas, ensuring continuous emergency response in remote and vulnerable communities.

Regional Resilience Grant Program Planning Projects

Monterey Bay Adaptation and Resilience Implementation and Funding Roadmap

Total Award: \$649,335

The City of Watsonville, in partnership with the City of Santa Cruz, CivicWell, Ecology Action, Association of Monterey Bay Area Governments, and Regeneración of Pajaro Valley will develop funding and implementation plans for priority adaptation goals, particularly addressing underserved and vulnerable communities.

Mendocino, Lake, Sonoma Tribal Resilience Initiative on Air Quality and Drought (MLS-TRIAD)

Total Award: \$657,415

The Public Health Institute, in partnership with the Big Valley Band of Pomo Indians, Middletown Rancheria of Pomo Indians, and Sherwood Valley Band of Pomo Indians will address drought, air quality, and climate change concerns through equitable planning, monitoring networks, water quality evaluation, and continuous improvement tracking.

North Coast Regional Climate Resilience Plan

Total Award: \$650,000

The County of Humboldt/North Coast Resource Partnership, in partnership with the Watershed Research and Training Center and Sonoma Water will prioritize vulnerable communities and focus on addressing multiple climate risks, forging diverse partnerships, and strengthening community capacity through planning, data integration, and stakeholder engagement.

Paradise Regional Wildfire Resilience Implementation Plan

Total Award: \$570,533

Paradise Recreation and Park District, in partnership with the Town of Paradise, Rural Community Assistance Corporation, and Camp Fire Collaborative will build on previous modeling work, by developing an implementation plan, including regional governance structures and cost-benefit analyses, to create regional wildfire buffer zones.

Santa Ana River Watershed Climate Adaptation and Resilience Plan

Total Award: \$644,190

Santa Ana River Watershed Project Authority, in partnership with the Soboba Band of Luiseño Indians and Inland Southern California Climate Collaborative, will address climate risks like drought, wildfire, and flooding, by developing multi-benefit strategies for the entire watershed and provide resources to pursue implementation funding.

Yolo County Regional Resilience Collaborative

Total Award: \$598,420

The County of Yolo, in partnership with the Yocha Dehe Wintun Nation, City of Davis, City of Woodland and University of California, Davis, will aim to build the region's first collaborative structure, engage vulnerable communities to identify shared climate priorities, establish a governance structure, and develop a funding strategy.

Coachella Valley Regional Water Resilience Plan

Total Award: \$649,335

The Coachella Valley Water District, in partnership with the Torres Martinez Desert Cahuilla Indians, and Pueblo Unido Community Development Corporation will address structural barriers to clean water access, prepare for droughts, improve infrastructure resilience, and align regional plans with state water management objectives.

Solano Bayshore Resiliency Project

Total Award: \$601,113

Fairfield-Suisun Sewer District, in partnership with the City of Suisun City, Greenbelt Alliance, and Solano Resource Conservation District will create a Sea Level Rise Vulnerability Analysis and Action Plan, emphasizing nature-based solutions and community engagement to address climate hazards affecting vulnerable communities.

Climate Resiliency through Regional Water Recharge in the San Joaquin Valley

Total Award: \$568,888

California State University, Fresno Foundation - California Water Institute, in partnership with Self-Help Enterprises, North Kings Groundwater Sustainability Agency, and Madera County Groundwater Sustainability Agency will address drought and flooding by planning for sustainable use of surface and groundwater, educating rural communities, and establishing a collaborative response team for effective floodwater management, ensuring vulnerable communities are prioritized.

Building Climate Resilience in the Central Sierra Region

Total Award: \$650,000

The County of Nevada in partnership with the Town of Truckee, Nevada City Rancheria Nisenan Tribe, Truckee Tahoe Airport District, Truckee Donner Public Utility District, and the Sierra Business Council will develop a climate collaborative and create a Climate Adaptation and Resilience Plan that embeds indigenous knowledge, prioritizes vulnerable populations, and enhances regional readiness for multiple climate risks.